

REMARKS

Claims 1-15 are pending in the application. Claims 3, 5, and 12 are amended herein. The Applicant hereby requests further examination and reconsideration of the application in view of these Amendments and Remarks.

In the event that the Examiner believes that this response does not place the application in condition for allowance, the Applicant requests a telephonic interview between the Examiner and the Applicant's attorney Steve Mendelsohn to discuss this amendment. The Applicant requests that the Examiner call Mr. Mendelsohn (215-557-6657) to arrange a convenient time for such an interview.

In the Office Action, the Examiner objects to the Abstract for its length, and, in response, Applicant has amended the Abstract to conform to the proper language and format.

In the Office Action, the Examiner objects to claims 3 and 5 for various informalities. In response, the Applicant has amended claims 3 and 5 as suggested by the Examiner. In addition, Applicant has amended claim 12 in a manner similar to amended claim 5 since claim 12 recites similar features to those of apparatus claim 5.

In the Office Action, the Examiner rejects claims 1-15 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,366,938 to Levison et al. (hereinafter "Levison") in view of U.S. Patent No. 5,822,365 to Lee (hereinafter "Lee"). In response, Applicant respectfully disagrees with the Examiner's rejections for the following reasons.

Applicant's claim 1 recites:

"wherein **each combiner** of the first and second sets comprises
an output tap that enables **the corresponding correlation value to**
be read out of the tree structure for one of the plurality of
spreading rates [emphasis added]."

Applicant's claim 1 clearly recites that output taps of the tree structure provide correlation values for differing spreading rates. Thus, Applicant's tree structure might allow a single correlator structure to be used to correlate received signals for a variety of spreading rates without changing the structure or correlation process. See, for example, Applicant's Specification at page 5, line 16, to page 6, line 13.

Levison describes a correlator based on an adder tree. However, as stated by the Examiner, Levison does not "disclose that each combiner of the first and second sets comprises an output tap that enables the corresponding correlation value to be read out of the tree structure for one of the

plurality of spreading rates.” Thus, Levison does not describe or suggest a tree structure providing correlation values for differing spreading rates.

In addition, Levison’s correlator comprises an address counter 21, switch matrix 22, stores 23 with corresponding sign changers 24, and an adder tree 25. Switch matrix 22 connects input sample lines to stores selected by address counter 21 in order to reduce capacitive loading on the input lines. Levison, at col. 3, line 61, to col. 4, line 8. The store that contains the most recent sample $S(i)$ rotates cyclically as i increments. Levison, at col. 4, lines 33-37. Consequently, a given output tap of correlator 20 of Levison could not provide a correlation value of a corresponding spreading rate since, for any given input sample at time i , the input sample word to be correlated begins at a different location (store output) at the base of adder tree 25. As each sample is received, the tap providing the correlation value of the corresponding spreading rate would change as each sample was received.

Lee describes a correlator that allows for variable correlation, but the correlator of Lee (through correlation length control circuit 420) changes the length of the correlation by employing a counter (N-counter 512) that counts the number N of samples that are correlated. Consequently, the counter is configured through changing the value of N depending on the correlation length desired. Lee, at col. 4, lines 20-45. Thus, Lee does not show a correlator structure that provides multiple length correlations without reconfiguration of the correlator, and so Lee does not show a tree structure providing correlation values for differing spreading rates.

Thus, neither Lee nor Levison describes a tree structure for a correlator where output taps of the tree structure provide correlation values for differing spreading rates.

Even if one were to combine the adder tree correlator of Levison with Lee’s use of a counter to change the number of samples correlated, this combination does not provide a tree structure with taps that provide correlation values of differing spreading rates without reconfiguration of the correlator. Levison, when combined with Lee, would simply vary the number of samples provided to the tree. Consequently, the structure of Levison and Lee could not provide correlation values for different spreading rates from a correlation tree, as recited by Applicant’s claim 1.

Thus, neither Levison nor Lee suggests that the tree structure can provide correlation values for different spreading rates from a correlation tree without reconfiguration of the correlator. Thus, Examiner’s combination of Levison and Lee, without suggestion of a modification to either Levison or Lee by the cited references is an improper combination and an improper use of hindsight.

A modification and/or combination of reference teachings is improper unless the prior art suggests such a modification or combination. See, e.g., Smithkline Diagnostics, Inc. v. Helena Laboratories Corp., 859 F.2d 878, 887, 8 USPQ2d 1468, 1475 (Fed. Cir. 1988) (a challenger to the validity of a patent "cannot pick and choose among the individual elements of assorted prior art references to create the claimed invention"; the challenger "has the burden to show some teaching or suggestion in the references to support their use in the particular claimed combination.").

Without a suggestion in the prior art for a necessary modification and/or combination, a rejection on the grounds of obviousness is an improper use of hindsight. If the prior art does not contain even a suggestion of the specific modifications that are needed to be made to the teachings of the prior art to yield the claimed invention, then a rejection on the grounds of obviousness based solely on the advantages provided by that claimed invention is a improper. See, e.g., Texas Instruments Inc. v. U.S. Int'l Trade Comm'n, 988 F.2d 1165, 1178, 26 USPQ2d 1018, 1029 (Fed. Cir. 1993) ("Absent . . . [a] suggestion to combine the references, respondents can do no more than piece the invention together using the patented invention as a template. Such hindsight reasoning is impermissible."); In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) ("As in all determinations under 35 U.S.C. section 103, the decisionmaker must bring judgment to bear. It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps.").

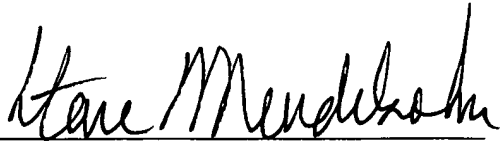
Consequently, neither Levison nor Lee, whether taken alone or in combination, disclose or suggest a correlation tree structure providing correlation values for different spreading rates from the correlation tree, as recited by Applicant's amended claim 1.

For all these reasons, the Applicant submits that claim 1 is allowable over Levison and Lee, whether taken alone or in combination. For similar reasons, the Applicant submits that claims 11 and 15 are also allowable over Levison and Lee, whether taken alone or in combination. Since claims 2-10 and 12-14 depend variously from claims 1 and 11, it is further submitted that those claims are also allowable over Levison and Lee, whether taken alone or in combination. The Applicant submits therefore that the rejection of the claims under § 103(a) have been overcome.

In view of the above amendments and remarks, the Applicant believes that the pending claims are in condition for allowance. Therefore, the Applicant believes that the entire application is now in condition for allowance, and early and favorable action is respectfully solicited.

Respectfully submitted,

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